Applicant: Osterlanger et al.

Application No.: 10/574,379

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in

the application:

Listing of Claims:

(currently amended) Device for modifying the wheel camber of a wheel

(1) on a motor vehicle, comprising: the wheel (1) is mounted on a wheel carrier (5,

51) so that it can pivot via a pivot bearing (4, 50), the pivot bearing includes an

outer bearing part connected to the wheel that is movable on an inner bearing part

on the wheel carrier. wherein a pivot plane described by the pivot bearing (4, 50) is

arranged at least approximately transverse to a center plane (E) of the wheel, and

the outer and inner bearing parts include arc-segment shaped tracks that extend in

the pivot plane, wherein and a position of a virtual rotational point (D) of the pivot

bearing (4,50) is above a wheel contact plane and on a side of the center plane (E) of

the wheel facing the vehicle.

2. (currently amended) Device according to claim 1, wherein an

intersection point (S) is formed by a Y-axis intersecting a rotational axis of the

wheel (1) and lying in the center plane (E) of the wheel, with an X-axis lying in the

wheel contact plane, wherein the rotational point (D) of the pivot bearing (4)

relative to the intersection point (S) is arranged in a field, which is defined with

- 2 -

Applicant: Osterlanger et al. Application No.: 10/574,379

[[X]] an X-coordinate approximately equal to 150 mm and [[Y]] a Y-coordinate approximately equal to 150 mm.

- 3. (currently amended) Device according to claim 2, wherein the rotational point (D) of the pivot bearing (4) lies on a radius vector, which intersects the intersection point (S) and which covers an angular range of approximately 30° as a lower value up to approximately 60° as an upper value relative to the X-axis.
- 4. (currently amended) Device according to claim 1, wherein the pivot bearing (4, 50) has a fixed pivot bearing part (7, 52), which is fixed relative to the wheel carrier (5, 51), and a pivoting pivot bearing part (8, 53), which can pivot in the pivot plane relative to the fixed pivot bearing part (7, 52).
- (currently amended) Device according to claim 4, wherein the wheel is mounted on the pivoting pivot bearing part (8, 53) so that it can rotate.
- (currently amended) Device according to claim 4, wherein an electromechanical actuator (23, 54) is supported on one side relative to the wheel carrier (5, 54) and on another side engages the pivoting pivot bearing part (8, 53).
- 7. (currently amended) Device for modifying the wheel camber of a wheel (4) on a motor vehicle, comprising: the wheel (1) is mounted on a wheel carrier (5, 51) so that it can pivot via a pivot bearing (4, 50), wherein a pivot plane described by the pivot bearing (5, 51) is arranged at least approximately transverse to a center plane E of the wheel, the pivot bearing (4, 50) has a fixed pivot bearing part

Applicant: Osterlanger et al.

Application No.: 10/574,379

(7, 52), which is fixed relative to the wheel carrier (5, 51), and a pivoting pivot

bearing part (8, 53), which can pivot in the pivot plane relative to the fixed pivot

bearing part (7, 52), and the wheel (1) is mounted on the pivoting pivot bearing part

(8, 53) so that it can rotate, an electromechanical actuator (23, 54) is supported on

one side relative to the wheel carrier (5, 51) and on an other side engages the

pivoting pivot bearing part (8.53) for pivoting the pivot bearing part (8.53).

8. (currently amended) Device according to claim 7 for modifying the

wheel camber of a wheel on a motor vehicle, comprising: the wheel mounted on a

wheel carrier so that it can pivot via a pivot bearing, wherein a pivot plane

described by the pivot bearing is arranged at least approximately transverse to a

center plane E of the wheel, the pivot bearing has a fixed pivot bearing part, which

is fixed relative to the wheel carrier, and a pivoting pivot bearing part, which can

pivot in the pivot plane relative to the fixed pivot bearing part, and the wheel is

mounted on the pivoting pivot bearing part so that it can rotate, an

electromechanical actuator is supported on one side relative to the wheel carrier

and on an other side engages the pivoting pivot bearing part for pivoting the pivot

bearing part, wherein the electromechanical actuator (23, 54) has an electric motor

(24, 55) and a roller body screw drive, with a spindle nut (26) supported on a

threaded spindle (27, 56) so that the spindle nut can rotate.

- 4 -

Applicant: Osterlanger et al. Application No.: 10/574.379

 (currently amended) Device according to claim 8, wherein the spindle nut (26) comprises a rotor (25) of the electric motor (24), and the threaded spindle (27) is held locked against rotation.

 (currently amended) Device according to claim 8, wherein the electric motor (24) is mounted on the wheel carrier (5).

 (currently amended) Device according to claim 10, wherein the electric motor (24) is in direct metallic contact with the metallic wheel carrier (5).

12. (currently amended) Device according to claim 8, wherein the threaded spindle (27) is locked in rotation to the pivoting pivot bearing part (8) and is held so that it cannot move in an axial direction, and rocking movements of the pivoting pivot bearing part (8) relative to the threaded spindle (27) are performed about a rocking axis arranged transverse to the threaded spindle (27).

13. (currently amended) Device according to claim 12, wherein a peg (31) arranged transverse to the threaded spindle (27) is roller-supported in a radial direction on the threaded spindle (27) by a biased roller bearing (33), and the peg (31) is mounted on the pivoting pivot bearing part (8).

14. (currently amended) Device according to claim 7 for modifying the wheel camber of a wheel on a motor vehicle, comprising: the wheel mounted on a wheel carrier so that it can pivot via a pivot bearing, wherein a pivot plane described by the pivot bearing is arranged at least approximately transverse to a

Applicant: Osterlanger et al. Application No.: 10/574,379

center plane E of the wheel, the pivot bearing has a fixed pivot bearing part, which

is fixed relative to the wheel carrier, and a pivoting pivot bearing part, which can

pivot in the pivot plane relative to the fixed pivot bearing part, and the wheel is

mounted on the pivoting pivot bearing part so that it can rotate, an

electromechanical actuator is supported on one side relative to the wheel carrier

and on an other side engages the pivoting pivot bearing part for pivoting the pivot

bearing part, wherein the wheel (1) is driven by a drive shaft (35), and the drive

shaft (35) extends through the pivot bearing (4).

15. (currently amended) Device according to claim 14, wherein the drive

shaft (35) extends through the wheel bearing (3).

16. (currently amended) Device according to claim 15, wherein the wheel

bearing (3) is mounted on the pivoting pivot bearing part (8).

17. (currently amended) Device according to claim 14, wherein the drive

shaft (35) is provided with a joint (36).

18. (currently amended) Device according to claim 15, wherein the pivot

bearing (4), the wheel bearing (3), and the drive shaft (35) with the joint (36) are

arranged one inside the other in a radial direction.

19. (currently amended) Device according to claim 18, wherein the pivot

bearing (4), the wheel bearing (3), and the joint (36) of the drive shaft (35) are

arranged in a common lubricating space (40) provided with lubricant.

- 6 -

Applicant: Osterlanger et al. Application No.: 10/574,379

20. (currently amended) Device according to claim 19, wherein the lubricating space (40) is defined by a folding or rolling bellows (37), which contacts, on one side, the fixed pivot bearing part (7) and, on the other side, the drive shaft

21. (currently amended) Device according to claim 20, wherein a seal packing (38) mounted on the drive shaft (35) so that it can rotate is arranged between the seal and the drive shaft (35).

(35).

22. (currently amended) Device according to claim 7 for modifying the wheel camber of a wheel on a motor vehicle, comprising: the wheel mounted on a wheel carrier so that it can pivot via a pivot bearing, wherein a pivot plane described by the pivot bearing is arranged at least approximately transverse to a center plane E of the wheel, the pivot bearing has a fixed pivot bearing part, which is fixed relative to the wheel carrier, and a pivoting pivot bearing part, which can pivot in the pivot plane relative to the fixed pivot bearing part, and the wheel is mounted on the pivoting pivot bearing part so that it can rotate, an electromechanical actuator is supported on one side relative to the wheel carrier and on an other side engages the pivoting pivot bearing part for pivoting the pivot bearing part, wherein between the fixed pivot bearing part (7) and the pivoting pivot bearing part (8) there is a roller bearing having roller bodies (14) that roll on arc-shaped tracks (13, 16).

Applicant: Osterlanger et al.

Application No.: 10/574,379

23. (currently amended) Device according to claim 22, wherein at least

one endless roller body channel (17) is provided for the roller bearing in which the

roller bodies (14) can circulate endlessly, and the roller body channel (14) has a load

section (18) with the arc-shaped tracks (13, 16), a return section (19), and two

deflection sections (20) connecting the load section (18) to the return section (19) to

form an endless circuit.

24. (currently amended) Device according to claim 23, wherein the

pivoting pivot bearing part (8) and the fixed pivot bearing part (7) are arranged one

inside the other and are provided with the arc-shaped tracks (13, 16) on facing

surfaces thereof.

25. (currently amended) Device according to claim 23, wherein one of the

two pivot bearing parts (7, 8) is provided with the return sections (19).

26. (currently amended) Device according to claim 23, wherein head

pieces (21) provided with the deflection sections (20) are arranged on opposing ends

of the pivot bearing (4).

27. (currently amended) Device according to claim 24, wherein the outer

fixed or pivoting pivot bearing part (7) is assembled from two longitudinal parts (10,

11), and the longitudinal axis of the pivot bearing part (7) lies in a dividing plane

thereof.

- 8 -

Applicant: Osterlanger et al. Application No.: 10/574,379

28. (currently amended) Method for producing a device Device according

to claim 27, wherein the outer fixed or pivoting pivot bearing part (8) is provided

with desired fracture positions along the dividing plane, wherein an initially one-

piece pivot bearing part (8) is broken apart along the desired fracture positions, so

that the two longitudinal parts (10, 11) are formed, wherein the two longitudinal

parts (10, 11) are provided with fracture surfaces, which enable a precisely fitting

joining of the two longitudinal parts (10, 11), at their facing fracture positions lying

in the dividing plane.

29.

(currently amended) Device according to claim 24, wherein the inner

pivoting or fixed pivot bearing part (7) has a tubular configuration viewed in cross

section and is provided on an outer surface with several ridges (12) distributed over

a periphery thereof and arranged concentric to the rotational point D of the pivot

bearing (4), and the ridges (12) carry the tracks (13, 16).

30. (currently amended) Device according to claim 29, wherein the tracks

(13, 16) are provided on opposite peripheral sides of the ridge (12).

31. (currently amended) Device according to claim 8, wherein a fail-safe

device (43) is provided, with which a camber position of the wheel (1) can be

detachably locked.

- 9 -

Applicant: Osterlanger et al. **Application No.:** 10/574,379

32. (currently amended) Device according to claim 31, wherein the fail-safe device (43) has a positive-fit part for positive-fit connection of the spindle nut (26) to a part fixed to a frame of the vehicle.